

Workshop on Complex Geometry

July 21 – 23, 2010

Room 210, Run Run Shaw Bldg., HKU

Program and Abstracts



**Institute of Mathematical Research
The University of Hong Kong**

Speakers:

Valery Alexeev	University of Georgia, Athens, USA
Yik-Man Chiang	University of Science & Technology, Hong Kong
Lawrence Ein	University of Illinois, Chicago, USA
Jaehyun Hong	Seoul National University, Korea
Ngaiming Mok	HKU, Hong Kong
Sui-Chung Ng	HKU, Hong Kong
Tuen-Wai Ng	HKU, Hong Kong
Yum-Tong Siu	Harvard University, USA
Xiaotao Sun	Chinese Academy of Sciences, Beijing, China
Wing-Keung To	National University of Singapore
Jonathan Tsai	Polytechnic University, Hong Kong
Julie Tzu-Yueh Wang	Academia Sinica, Taipei, Taiwan
Lin Weng	University of Kyushu, Fukuoka, Japan
Sai-Kee Yeung	Purdue University, USA
Wanke Yin	Wuhan University, Wuhan, China

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Time / Date	Jul 21 (Wed)	Jul 22 (Thur)	Jul 23 (Fri)
9:30 – 10:30	Siu	Ein	Alexeev
10:30 – 10:50	Tea Break		
10:50 – 11:50	Chiang	To	Sun
Lunch Break			
14:00 – 15:00	Yin	Wang	Weng
15:10 – 16:10	Ng SC	Tsai	Hong
16:10 – 16:30	Tea Break		
16:30 – 17:30	Mok	Ng TW	Yeung

Last updated: Jul 13, 2010

PROGRAM

July 21, 2010
Wednesday

9:25 **Ngaiming Mok**, Director, Institute of Mathematical Research
Opening Remarks

9:30 – 10:30 **Yum-Tong Siu**, Harvard University, USA
Applications of curvature properties of direct images of relative pluricanonical bundles

Tea Break

10:50 – 11:50 **Yik-Man Chiang**, University of Science & Technology, Hong Kong
Nevanlinna theory based on Askey-Wilson divided difference operator

Lunch Break

14:00 – 15:00 **Wanke Yin**, Wuhan University, Wuhan, China
Equivalence problems for Bishop surfaces

15:10 – 16:10 **Sui-Chung Ng**, HKU, Hong Kong
Proper holomorphic maps on bounded symmetric domains of rank at least 2 and characteristic symmetric subspaces

Tea Break

16:30 – 17:30 **Ngaiming Mok**, HKU, Hong Kong
Boundary behavior of holomorphic maps into bounded symmetric domains and applications to geometric problems

July 22, 2010
Thursday

9:30 – 10:30 **Lawrence Ein**, University of Illinois, Chicago, USA
Pseudoeffective and nef classes of higher codimension cycles

Tea Break

10:50 – 11:50 **Wing-Keung To**, National University of Singapore
Finsler metrics, Kobayashi hyperbolicity and moduli spaces of canonically polarized manifolds

Lunch Break

14:00 – 15:00 **Julie Tzu-Yueh Wang**, Academia Sinica, Taipei, Taiwan
 p -adic hyperbolicity and Z -integral points on varieties

15:10 – 16:10 **Jonathan Tsai**, Polytechnic University, Hong Kong
The scaling limit of 2-d myopic random walk

Tea Break

16:30 – 17:30 **Tuen-Wai Ng**, HKU, Hong Kong
Two-variable Wiman-Valiron theory and its applications to PDEs

July 23, 2010
Friday

9:30 – 10:30 **Valery Alexeev**, University of Georgia, Athens, USA
On compactifications of moduli spaces of K3 surfaces

Tea Break

10:50 – 11:50 **Xiaotao Sun**, Chinese Academy of Sciences, Beijing, China
Frobenius morphism and vector bundles

Lunch Break

14:00 – 15:00 **Lin Weng**, University of Kyushu, Fukuoka, Japan
Relative Bott-Chern secondary characteristic classes

15:10 – 16:10 **Jaehyun Hong**, Seoul National University, Korea
Classification of smooth Schubert varieties in a rational homogeneous manifold of Picard number one

Tea Break

16:30 – 17:30 **Sai-Kee Yeung**, Purdue University, USA
Infinitesimal deformation, local deformation, and rigidity of tangent bundle of complex two ball quotients

17:30 **Kai Man Tsang**, Head, Department of Mathematics
Closing Remarks